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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,100	07/30/2001	Jari Ijas	460-010468-US(PAR)	2593
2512	7590	11/03/2006	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			QUIETT, CARRAMAH J	
			ART UNIT	PAPER NUMBER
			2622	

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/918,100		JARI IJAS	
	<b>Examiner</b>		<b>Art Unit</b>	
	Carramah J. Quiett		2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 August 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17 and 18 is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-8,10-13 and 19-22 is/are rejected.
- 7) ☒ Claim(s) 2,5,9,14 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. The amendment(s), filed on 08/10/2006, have been entered and made of record. Claims 1-22 are pending.

### *Response to Arguments*

2. Applicant's arguments filed 08/10/2006 have been fully considered but they are not persuasive.

In the previous Office Action, Examiner rejected **claims 1, 4, 6, 8, 11-13 and 16** under 35 U.S.C. §103(a) as being unpatentable over Suso et al. (U.S. Pat. #6,069,648) in view of Yoshida et al. (U.S. Pat. #6,690,417). However, in the Remarks filed 08/10/2006, Applicants disagree.

For **claim 1**, Applicants assert that the combination of Suso and Yoshida does not teach a third housing part arranged for holding the device on the palm in the first and second use positions comprising a first wall to be placed transversely to the user's palm, an opposite wall on the opposite side of the third housing part in relation to said first wall, two adjacent walls between said first wall and said opposite wall, and an upper wall.

Particularly for claim 1, Applicants state that Suso does not disclose that the housing is arranged for holding the device on the palm in the first and second use positions and that holding the housing in the user's palm would render the camera and lens useless. Examiner respectfully disagrees. Applicants did not specify the use of each of the first and second positions. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., camera and lens being the

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use of each of the first and second positions) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Based on claimed third housing of claim 1, Súsó's device is useful when arranged for holding the device on the palm in the first and second use positions. As illustrated in figs. 4, 5b-5c; there are various positions of the device. Therefore, a user can choose to arrange the third housing for holding in any manner. When the device of Suso is in the first/closed use position, the antenna can be shortened (col. 3, lines 46-53). Additionally, the closed use position inherently protects the parts of the phone when the device is in someone's pocket as well as providing a use when the phone rings to notify the operator of an incoming call. Please see fig. 3a and read col. 4, lines 26-28. For the second/open use position, the antenna is in an extended state and can be used as a telephone as well as a camera (col. 3, lines 54-57 and col. 4, lines 30-38).

Also for claim 1, Applicants assert that Suso does not teach a first wall to be placed transversely to the user's palm, an opposite wall on the opposite side of the third housing part in relation to said first wall, two adjacent walls between said first wall and said opposite wall, and an upper wall. Examiner respectfully disagrees. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the shape of the walls) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore based on the inter alia of claim 1, Suso discloses a first wall (facing out of the page) to be placed transversely to the user's palm (figs. 4, 5b-5c; due the various positions of the

device, its inherent that a user can choose to arrange the third housing for holding in any manner), an opposite wall (facing into of the page) on the opposite side of the third housing part in relation to said first wall, two adjacent walls (right and left) between said first wall and said opposite wall, and an upper wall (abuts the bottom portion of the first housing, ref. 1);

Lastly for claim 1, Suso is also used to teach wherein one of said adjacent walls (right and left) is provided with at least one key button (fig. 1c, ref. 11) within the reach of the fingers for controlling the electronic functions of the device col. 2, line 57; col. 4, lines 63-67), and a navigation key being within the reach of the forefinger, said navigation key being equipped also with a push-button function for making a selection and arranged rotatable in at least two opposite directions – Suso discloses a power source button (fig. 1c, ref. 11; col. 3, lines 23-25) at the rotary shaft, which is on the left edge of the housing member (fig. 1a, ref. 8).

Yoshida was combined with Suso to teach an information communication terminal device (fig. 1) comprising: two adjacent walls (figs. 1 and 2) wherein *each* one of said two adjacent walls to have at least one key button (103 and 110). Please read col. 5, lines 31-41. Yoshida also discloses a menu browsing navigation key (11), wherein said first wall, said upper wall or\* an edge between said first wall and said upper wall is provided with the navigation key. a navigation key. Please read col. 5, lines 36-41 and col. 6, lines 33-37. The combination of Suso and Yoshida allows a user to hold the device with the hand/fingers to naturally make contact with the key buttons or navigation key thereby easily executing the various functions of the device (Yoshida, col. 6, lines 33-37).

Applicants assert that **claim 4** is patentable over the combination of Suso and Yoshida. Applicants explain that if Suso and Yoshida were combined the electronic display would be

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placed on the back side of the upper case (1) or the lower case (2) in Suso and not in the cylindrical housing member (8). Examiner respectfully disagrees. Claim 4 recites, "...an electronic display *arranged on* at least one of the two adjacent walls..." In other words, claim 4 does not recite, "an electronic display *arranged in* at least one of the two adjacent walls." In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., an electronic display *arranged in* at least one of the two adjacent walls) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Also, Suso is used for teaching the device wherein the device further comprises an electronic display arranged on at least one of said adjacent walls (Suso, fig. 6; col. 4, line 63 – col. 7, line 15), and wherein said electronic display is arranged for presenting data and information to the user (Suso, fig. 7). Yoshida modifies Suso by teaching that an electronic display (fig. 1, ref. 104) is arranged for presenting data and information to the user in the closed use position (col. 5, line 66 – col. 6, line 9). Combining Suso and Yoshida allows a user to easily execute the various functions of the device (Yoshida, col. 6, lines 33-37).

For **claim 8**, Applicants disagrees with Examiner's assertion that the power source button (11) and the rotary shaft (7) of Suso encompass a navigation key. Examiner maintains this assertion. However, ref. 6 is also apart of this navigation key composition. Please note that Examiner did not omit this element. Suso teaches that both refs. 6 and 7 are provided for the hinge (col. 2, line 66 – col. 3, line 5). As stated in the previous Office Action, this feature allows a user to turn on the device for selecting the record mode (col. 4, line 63 – col. 5, line 4) and the

option to rotate (an procedure for controlling) the camera (fig. 1a, refs. 6 and 7; col. 2, line 66 – col. 3, line 5). On the right side of the housing member, there is a connector part (fig. 1b, ref. 3), which connects the electrically coupled housings (col. 1, line 52 – col. 2, line 12). Also, in col. 3, lines 3-11, Suso teaches that the housing member (8), which holds the video camera, is rotatably attached to the rotary shaft supporting part. Accordingly, the rejection to claim 8 is maintained.

For **claim 12**, Applicants assert that Suso does not disclose a CMT user interface that is usable in the closed use position of the device. Examiner respectfully disagrees. As taught on page 1 of the present specification, CMT stands for Cellular Mobile Telephone. Suso's device has a CMT user interface whether it is opened or closed. Although Suso states that when the device is closed it is in a non-use state in col. 4, lines 26-28, it is inherent that Suso's CMT user interface is available in the closed use position. The CMT user interface of Suso includes an antenna 10. The antenna can be shortened when the first and second housings are closed (col. 3, lines 46-58). Inherently, when the device is in the closed use position, the phone can ring to notify the operator of an incoming call. The antenna and the infrared communication means are interfaces, which receives/transmits signals (col. 3, lines 19-26 and 46-65). Accordingly, the rejection to claim 12 is maintained.

Accordingly, the rejections to **claims 13 and 16** are maintained for reasons similar to those described above with respect to claim 1. Also, the rejection to **claims 6 and 11** are each maintained because they depend from claim 1. Newly added **claims 19 and 21** have also been rejected using the Suso and Yoshida combination.

The rejection to **claim 3** under 35 U.S.C. §103(a) as being unpatentable over Suso et al. (U.S. Pat. #6,069,648) in view of Yoshida et al. (U.S. Pat. #6,690,417) as applied to claim 1, and

further in view of Frye et al. (U.S. Pat. #6,188,765) is *maintained*. Applicants' arguments regarding claim 3 are moot because the rejection to claim 1 maintained.

The rejection to **claim 7** under 35 U.S.C. §103(a) as being unpatentable over Suso et al. (U.S. Pat. #6,069,648) in view of Yoshida et al. (U.S. Pat. #6,690,417) as applied to claim 1, and further in view of Phillipps (GB Pub. #2314179A) is *maintained*. Applicants' arguments regarding claim 3 are moot because the rejection to claim 1 maintained.

In the previous Office Action, Examiner rejected **claim 10** under 35 U.S.C. §103(a) as being unpatentable over Suso et al. (U.S. Pat. #6,069,648) in view of Yoshida et al. (U.S. Pat. #6,690,417) as applied to claim 1, and further in view of Abe (JP Pub. #11-136655) and Frye et al. (U.S. Pat. #6,188,765) However, in the Remarks filed 08/10/2006, Applicants disagree.

For **claim 10**, Applicant asserts that the combination of Suso, Yoshida, Abe, and Frye does not disclose or suggest a hinge mechanism having an ejector mechanism and an unfolding mechanism as claimed in claim 10 of the present application. Examiner respectfully disagrees. Abe is utilized to teach an ejector mechanism arranged to eject the first and the second housing parts wholly and the hinge system partly from the third housing part. Abe discloses the first (ref. 10a) and the second (ref. 10b) housing parts placed against each other are arranged (please see drawings 1 and 3), upon closing, to be partly inserted in the third housing part (ref. 30) to reduce the outer dimensions of the device. As illustrated in drawings 1 and 3, the user can *eject* the first and second housings along with the hinge from the third housing. Similar to Suso, Abe's camera housing (ref. 31) is also rotatable (English translation of Abe, paragraphs 0051-0017). The housing insertion/ejection technique of Abe allows the consumer can choose whether or not he wants to have a camera on his communication device (Abe, paragraph [0010]).



Frye is utilized to teach an unfolding mechanism arranged to assist in the opening of the first and the second housing parts in the opened use position. Frye discloses a ridge (unfolding mechanism; fig. 4, ref. 10) within the reach of the forefinger for opening the first and the second housing parts automatically by means of the hinge mechanism (col. 4, lines 17-41). The ridge/unfolding mechanism of Frye assists a user of the handset in being able to open the phone using only one hand (Frye, col. 1, lines 49-50).

### ***Claim Objections***

Claim 21 is objected to because of the following informalities: Claim 21 recites the inter alia "...said CMT interface comprises a set of openings for the phone earpiece on *the outer wall* of the first housing part." Applicant has not properly introduced the term "outer wall". In other words, "outer wall" was not previously claimed in claims 1 and 12. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. **Claims 1, 4, 6, 8, 11-13, 16, 19, and 21** are rejected under 35 U.S.C. §103(a) as being unpatentable over Suso et al. (U.S. Pat. #6,069,648) in view of Yoshida et al. (U.S. Pat. #6,690,417).

For **claim 1**, Suso discloses a portable, foldable electronic device (an information communication terminal device, figs. 1-5) comprising an opened use and a closed use position (figs. 3a and 3b; col. 3, lines 45-57), said device comprising at least:

a first housing part comprising at least an inner wall (fig. 3b, ref. 1),

a second housing part comprising at least an inner wall (fig. 3b, ref. 2);

a hinge mechanism (fig. 1a, refs. 6 and 7; col. 2, line 66 – col. 3, line 5) arranged to fold the first and the second housing parts in the closed use position in relation to each other for a first use position, wherein the inner walls are against each other (fig. 3a; col. 3, lines 45-52), and in the open use position for a second use position (col. 3, lines 54-58; col. 4, lines 30-38), wherein the inner walls are adjacent to each other (fig. 3b). Although Suso states that when the device is closed it is in a non-use state in col. 4, lines 26-28, it is inherent that Suso's device has a use for the closed position. When device is in the closed position, this position is used to protect the parts of the phone when the device is in someone's pocket. Additionally, this device is still in use when it's in the closed position because the phone can ring to notify the operator of an incoming call,

an electronic display (fig. 1a, refs. 4,5) fitted on at least one of said inner wall and arranged for displaying information to a user in the opened use position (figs. 1/3a), when the device is on a palm of the user and the display is directed at the user. Please see figs. 4-5d, which shows Suso's device being operated at different angles. This allows the device to display information to the user in the opened position (fig. 1), when the device is on the palm or on a base and the display is directed at the user. Please read col. 4, lines 11-60, and

a third housing part (fig 1a, ref. 8) arranged for holding the device on the palm in the first and second use positions (col. 2, line 54 – col. 3, line 5; col. 4, lines 11-60 and illustrated in figs. 1a-1b) comprising a first wall (facing out of the page) to be placed transversely to the user's palm (figs. 4, 5b-5c; due the various positions of the device, its inherent that a user can choose to arrange the third housing for holding in any manner), an opposite wall (facing into the page) on the opposite side of the third housing part in relation to said first wall, two adjacent walls (right and left) between said first wall and said opposite wall, and an upper wall (abuts the bottom portion of the first housing, ref. 1);

wherein the hinge mechanism (fig. 1a, refs. 6 and 7) is fitted on the side of said opposite wall (facing into of the page) and arranged for folding the first and the second housing parts also in relation to the third housing part (fig 1a, ref. 8). Please read col. 2, line 53 – col. 3, line 5;

wherein one of said adjacent walls (right and left) is provided with at least one key button (fig. 1c, ref. 11) within the reach of the fingers for controlling the electronic functions of the device col. 2, line 57; col. 4, lines 63-67). When the power (another word for control) source button is turned on, a menu is displayed.

wherein said first wall, said upper wall or\* an edge between said first wall and said upper wall is provided with a navigation key, said navigation key being within the reach of the forefinger, said navigation key being equipped also with a push-button function for making a selection and arranged rotatable in at least two opposite directions – Suso discloses a power source button (fig. 1c, ref. 11; col. 3, lines 23-25) at the rotary shaft, which is on the left edge of the housing member (fig. 1a, ref. 8). Together the power source button and the rotary shaft encompass a navigation key. This feature allows a user to turn on the device for selecting the

record mode (col. 4, line 63 – col. 5, line 4) and the option to rotate the camera (fig. 1a, refs. 6 and 7; col. 2, line 66 – col. 3, line 5). On the right side of the housing member, there is a connector part (fig. 1b, ref. 3), which connects the electrically coupled housings (col. 1, line 52 – col. 2, line 12).

Suso does not expressly disclose a device wherein *each* one of said two adjacent walls is provided with at least one key button. In figs. 7-9, he discloses several navigation keys for browsing menus displayed on said electronic display. However, Suso also does not expressly disclose a menu browsing navigation key, wherein said first wall, said upper wall or\* an edge between said first wall and said upper wall is provided with a navigation key.

In a similar field of endeavor, Yoshida discloses an information communication terminal device (fig. 1) comprising: two adjacent walls (figs. 1 and 2) wherein each one of said two adjacent walls to have at least one key button (103 and 110). Please read col. 5, lines 31-41. Yoshida also discloses a menu browsing navigation key (11), wherein said first wall, said upper wall or\* an edge between said first wall and said upper wall is provided with the navigation key. a navigation key. Please read col. 5, lines 36-41 and col. 6, lines 33-37. In light of the teachings of Yoshida, it would have been obvious to one of ordinary skill in the art at the time the invention was made for to modify Suso's device wherein each one of the adjacent walls is provided with at least one key button and wherein a navigation key, for browsing menus displayed on said electronic display, is on said first wall, said upper wall or\* an edge between said first wall and said upper wall. These modifications will allow a user to hold the device with the hand/fingers to naturally make contact with the key buttons or navigation key thereby easily executing the various functions of the device (Yoshida, col. 6, lines 33-37).

**For claim 4**, Suso, as modified by Yoshida, discloses the device wherein the device further comprises an electronic display arranged on at least one of said adjacent walls (Suso, fig. 6; col. 4, line 63 – col. 7, line 15), and wherein said electronic display is arranged for presenting data and information to the user (Suso, fig. 7) in the closed use position (inherently – Yoshida, fig. 1, ref. 104; col. 5, line 66 – col. 6, line 9). Additionally, as illustrated in figs. 1b and 1c, the electronic display housing of Suso abuts each adjacent wall (right and left) and is arranged for presenting data and information to the user in the closed position of the device. When the device is closed, this device is inherently still in use, via the infrared communication means (fig. 3a, ref. 10'). Since ref. 10', which is a communication means, it presents data and information to the user by transmitting information to a computer (col. 3, lines 59-65).

**For claim 6**, Suso, as modified by Yoshida, discloses the device wherein, the opened use position, the third housing part is on the opposite side of the device in relation to the inner walls, extending in a direction which is perpendicular to said inner walls. In Suso, please see figs. 1a and 3b; and read col. 2, lines 48-65.

**For claim 8**, Suso, as modified by Yoshida, discloses the device (please refer to the Suso reference), wherein one of the housing parts (fig. 1a, ref. 8) is provided with electronic image sensor means for still and/or video images (col. 2, lines 59-62), wherein said at least one button (fig. 1c, ref. 11) and the navigation key are also arranged for the control of said electronic image sensor means (col. 4, line 63 – col. 5, line 4). As stated earlier, together the power source button and the rotary shaft encompass a navigation key. This feature allows a user to turn on the device for selecting the record mode (col. 4, line 63 – col. 5, line 4) and the option to rotate (an procedure for controlling) the camera (fig. 1a, refs. 6 and 7; col. 2, line 66 – col. 3, line 5). On

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the right side of the housing member, there is a connector part (fig. 1b, ref. 3), which connects the electrically coupled housings (col. 1, line 52 – col. 2, line 12).

For **claim 11**, Suso, as modified by Yoshida, discloses the device, wherein the navigation key is a rotatable roll or a rocker key. In Suso, please see fig. 1a, refs. 6 and 7; and read col. 2, line 66 – col. 3, line 5; and col. 4, line 63 – col. 5, line 4.

For **claim 12**, Suso, as modified by Yoshida, discloses the device (please refer to the Suso reference) wherein the device is a communication device comprising at least a CMT user interface which is available in the closed use position of the device (1), and at least a PDA user interface which is available in the opened use position of the device (1). Please see figs. 3a and 7; and read col. 1, line 48- col. 3, line 12. As mentioned in Suso's disclosure, his device is also a portable phone. When the device is closed, this device is inherently still in use, via the infrared communication means (fig. 3a, ref. 10'), because information from the device can be transmitted to a computer (col. 3, lines 59-65).

For **claim 13**, Suso discloses a handle arrangement for a portable (Note: Due to various positions of the device in Suso, it is inherent that a user can choose to hold the third housing in any manner. The handle arrangement can be the either one of the first, second, or third housings), foldable electronic device comprising two or\* more use positions and comprising at least two housing parts (fig. 3b, refs. 1 and 2) foldable in relation to each other (figs. 3a and 3b; col. 3, lines 45-57) and a hinge mechanism (fig. 1a, refs. 6 and 7; col. 2, line 66 – col. 3, line 5) arranged for connecting and folding the first and the second housing parts in relation to each other (col. 2, line 66 – col. 3, line 5), wherein the handle arrangement comprises a handle-like

third housing part (fig 1a, ref. 8) arranged for holding the device on a user's palm in the different use positions said third housing part comprising at least:

a first wall (facing out of the page) to be placed transversely against the user's palm (figs. 4, 5b-5c; **Note:** As stated before, due the various positions of the device, it is inherent that a user can choose to hold the third housing in any manner), and

an opposite wall (facing into of the page) on the opposite side of the third housing part in relation to said first wall,

two adjacent walls (right and left) between said first wall and an opposite wall, and

an upper wall (abuts the bottom portion of the first housing, ref. 1);

wherein said hinge mechanism (fig. 1a, refs. 6 and 7) is connected on said opposite wall (facing into of the page) (please read col. 2, line 53 thru col. 3, line 5), and

wherein one of said adjacent walls (right and left) is provided with at least one key button (fig. 1c, ref. 11) within the reach of the fingers for controlling the electronic functions of the device col. 2, line 57; col. 4, lines 63-67). When the power (another word for control) source button is turned on, a menu is displayed.

wherein said first wall, said upper wall or an edge between said first wall and said upper wall is provided with a navigation key within the reach of the forefinger, said navigation key being equipped also with a push-button function for making a selection and arranged rotatable in at least two opposite directions – Suso discloses a power source button (fig. 1c, ref. 11; col. 3, lines 23-25) at the rotary shaft, which is on the left edge of the housing member (fig. 1a, ref. 8). Together the power source button and the rotary shaft encompass a navigation key. This feature allows a user to turn on the device for selecting the record mode (col. 4, line 63 – col. 5, line 4)

and the option to rotate the camera (fig. 1a, refs. 6 and 7; col. 2, line 66 – col. 3, line 5). On the right side of the housing member, there is a connector part (fig. 1b, ref. 3), which connects the electrically coupled housings (col. 1, line 52 – col. 2, line 12). Additionally, Suso's navigation keys are placed on the first or second housings (fig. 7, ref. 21a and fig. 8, ref. 23b).

Suso does not expressly disclose a device wherein each one of said two adjacent walls is provided with at least one key button. In figs. 7-9, he discloses several navigation keys for browsing menus displayed on said electronic display. However, Suso also does not expressly disclose a menu browsing navigation key, wherein said first wall, said upper wall or\* an edge between said first wall and said upper wall is provided with a navigation key.

In a similar field of endeavor, Yoshida discloses an information communication terminal device (fig. 1) comprising: two adjacent walls (figs. 1 and 2) wherein each one of said two adjacent walls to have at least one key button (103 and 110). Please read col. 5, lines 31-41. Yoshida also discloses a menu browsing navigation key (11), wherein said first wall, said upper wall or\* an edge between said first wall and said upper wall is provided with the navigation key. a navigation key. Please read col. 5, lines 36-41 and col. 6, lines 33-37. In light of the teachings of Yoshida, it would have been obvious to one of ordinary skill in the art at the time the invention was made for to modify Suso's device wherein each one of the adjacent walls is provided with at least one key button and wherein a navigation key, for browsing menus displayed on said electronic display, is on said first wall, said upper wall or\* an edge between said first wall and said upper wall. These modifications will allow a user to hold the device with the hand/fingers to naturally make contact with the key buttons or navigation key thereby easily executing the various functions of the device (Yoshida, col. 6, lines 33-37).



For **claim 16**, Suso discloses a handle arrangement for a portable (Note: Due to various positions of the device, it's inherent that a user can choose to hold the third housing in any manner. The handle arrangement can be the either one of the first, second, or third housings), foldable electronic device comprising two or\* more use positions and comprising at least two housing parts (fig. 3b, refs. 1 and 2) foldable in relation to each other (figs. 3a and 3b; col. 3, lines 45-57) and a hinge mechanism (fig. 1a, refs. 6 and 7; col. 2, line 66 – col. 3, line 5) arranged for connecting and folding the first and the second housing parts in relation to each other (col. 2, line 66 – col. 3, line 5), wherein the handle arrangement comprises a handle-like third housing part (fig 1a, ref. 8) arranged for holding the device on a user's palm in the different use positions, said third housing part comprising at least:

a first wall (facing out of the page) to be placed transversely against the user's palm (figs. 4, 5b-5c; Note: As stated before, due the various positions of the device, it is inherent that a user can choose to hold the third housing in any manner), and

an opposite wall (facing into of the page) on the opposite side of the third housing part in relation to said first wall,

two adjacent walls (right and left) between said first wall and an opposite wall, and

an upper wall (abuts the bottom portion of the first housing, ref. 1);

wherein one of said housing parts (fig. 1a, refs. 6 and 7) directly is connected on said opposite wall (facing into of the page) (please read col. 2, line 53 thru col. 3, line 5), wherein the hinge mechanism (fig. 1a, refs. 6 and 7) and the third housing part (fig 1a, ref. 8) are placed on opposite sides of said one of said housing parts (fig 1a, ref. 8), and

wherein one of said adjacent walls (right and left) is provided with at least one key button (fig. 1c, ref. 11) within the reach of the fingers for controlling the electronic functions of the device col. 2, line 57; col. 4, lines 63-67). When the power (another word for control) source button is turned on, a menu is displayed.

wherein said first wall, said upper wall or\* an edge between said first wall and said upper wall is provided with a navigation key within the reach of the forefinger, said navigation key being equipped also with a push-button function for making a selection and arranged rotatable in at least two opposite directions – Suso discloses a power source button (fig. 1c, ref. 11; col. 3, lines 23-25) at the rotary shaft, which is on the left edge of the housing member (fig. 1a, ref. 8). Together the power source button and the rotary shaft encompass a navigation key. This feature allows a user to turn on the device for selecting the record mode (col. 4, line 63 – col. 5, line 4) and the option to rotate the camera (fig. 1a, refs. 6 and 7; col. 2, line 66 – col. 3, line 5). On the right side of the housing member, there is a connector part (fig. 1b, ref. 3), which connects the electrically coupled housings (col. 1, line 52 – col. 2, line 12).

Suso does not expressly disclose a device wherein each one of said two adjacent walls is provided with at least one key button. In figs. 7-9, he discloses several navigation keys for browsing menus displayed on said electronic display. However, Suso also does not expressly disclose a menu browsing navigation key, wherein said first wall, said upper wall or\* an edge between said first wall and said upper wall is provided with a navigation key.

For **claim 19**, Suso, as modified by Yoshida discloses the device, wherein said opened use position is a CMT use position, and said closed use position is a PDA use position. For the PDA use position, please see figs. 3a and 7; and read col. 2, line 48 – col. 3, line 12. As far as

the CMT use position is concerned, Suso's device has a CMT user interface whether it is opened or closed. Although Suso states that when the device is closed it is in a non-use state in col. 4, lines 26-28, it is inherent that Suso's CMT user interface is available in the closed use position. The CMT user interface of Suso includes an antenna 10. The antenna can be shortened when the first and second housings are closed (col. 3, lines 46-58). Inherently, when the device is in the closed use position, the phone can ring to notify the operator of an incoming call. The antenna and the infrared communication means are interfaces, which receives/transmits signals (col. 3, lines 19-26 and 46-65).

For **claim 21**, Suso, as modified by Yoshida illustrates a CMT user interface with an earphone jack 12 in figure 1c (col. 2, lines 557-58). However, Suso (nor Yoshida) do not expressly disclose the device, wherein said CMT interface comprises a set of openings for the phone earpiece on the outer wall of the first housing part. Examiner takes Official Notice that it is well known in the art to have a CMT interface comprising a set of openings for the phone earpiece on the outer wall of the first housing part. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the CMT interface of Suso with a set of openings for the phone earpiece on the outer wall of the first housing part. This modification would provide more conveniences for the user.

5. **Claim 3** is rejected under 35 U.S.C. §103(a) as being unpatentable over Suso et al. (U.S. Pat. #6,069,648) in view of Yoshida et al. (U.S. Pat. #6,690,417) as applied to claim 1 above, and further in view of Frye et al. (U.S. Pat. #6,188,765).

For **claim 3**, Suso, as modified by Yoshida, does not disclose the device, wherein said upper wall is provided with a key button within the reach of the forefinger for opening the first and the second housing parts automatically by means of the hinge mechanism. Instead, Suso's device has a hinge mechanism (fig. 1a, refs. 6 and 7) that rotates (col. 2, line 66- col. 3, line 5).

Frye discloses characterized in that said upper wall is provided with a key button (fig. 4, ref. 10) within the reach of the forefinger for opening the first and the second housing parts automatically by means of the hinge mechanism (col. 4, lines 17-41). In light of the teaching of Frye, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement Suso's invention with the key button of Frye to assist a user of the handset in being able to open the phone using only one hand (Frye, col. 1, lines 49-50).

6. **Claim 7** is rejected under 35 U.S.C. §103(a) as being unpatentable over Suso et al. (U.S. Pat. #6,069,648) in view of Yoshida et al. (U.S. Pat. #6,690,417) as applied to claim 1 above, and further in view of Phillipps (GB Pub. #2314179A).

For **claim 7**, Suso, as modified by Yoshida, discloses the device wherein in the opened use position, the inner walls are parallel and placed adjacent to each other (see Suso – fig. 1), but they do not form a uniform inner wall.

In a similar field of endeavor, Phillipps discloses a portable electronic apparatus characterized in that in its opened position, the inner walls are parallel and placed adjacent to each other to form a uniform inner wall (Abstract, figure 5). Similar to Suso, Phillipps has three housings, which includes a hinge mechanism (fig. 5, ref. 13). In addition Phillipps' apparatus may be applied to a combined mobile telephone and computer apparatus (page 1, lines 24-28). In light of the teaching of Phillipps, it would have been obvious to one of ordinary skill in the art

at the time the invention was made to implement Suso's invention with the uniform inner wall of Phillipps so that information the device can be read or written similar to a book or notebook (Phillipps, page 2, lines 11-14).

7. **Claim 10** is rejected under 35 U.S.C. §103(a) as being unpatentable over Suso et al. (U.S. Pat. #6,069,648) in view of Yoshida et al. (U.S. Pat. #6,690,417) as applied to claim 1 above, and further in view of Abe (JP Pub. #11-136655) and Frye et al. (U.S. Pat. #6,188,765).

For **claim 10**, Suso, as modified by Yoshida, discloses the device (please refer to Suso) the hinge mechanism comprises:

a hinge system (fig. 1a, refs. 6 and 7; col. 2, line 66 – col. 3, line 5) arranged for folding the first and the second housing parts in relation to each other and in relation to the third housing part (figs. 3a and 3b; col. 3, lines 45-57).

In Suso, column 3 lines 27-44, describes how the housings are inserted into the hinge mechanism. It is apparent that the first and the second housing parts can be ejected from the third housing part via the user by separating the housings in reverse to the method for inserting the housings. Since Suso's device is capable of numerous positions (figs. 4 and 5a-5d) moving the first and second housing away from the third housing can apparently be completed before opening in opposite directions. Additionally, the hinge mechanism allows one to rotate the camera housing (ref. 8).

Suso (nor Yoshida) does not disclose an ejector mechanism arranged to eject the first and the second housing parts wholly and the hinge system partly from the third housing part, and an unfolding mechanism arranged to assist in the opening of the first and the second housing parts in the opened use position.

In a similar field of endeavor, Abe discloses the first (ref. 10a) and the second (ref. 10b) housing parts placed against each other are arranged (please see drawings 1 and 3), upon closing, to be partly inserted in the third housing part (ref. 30) to reduce the outer dimensions of the device. As illustrated in drawings 1 and 3, the user can *eject* the first and second housings along with the hinge from the third housing. Similar to Suso, Abe's camera housing (ref. 31) is also rotatable (English translation of Abe, paragraphs 0051-0017). In light of the teaching of Abe, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement Suso's invention with the housing insertion technique of Abe so that the consumer can choose whether or not he wants to have a camera on his communication device (Abe, paragraph [0010]).

In a similar field of endeavor, Frye discloses a ridge (unfolding mechanism; fig. 4, ref. 10) within the reach of the forefinger for opening the first and the second housing parts automatically by means of the hinge mechanism (col. 4, lines 17-41). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement Suso's invention with the ridge of Frye to assist a user of the handset in being able to open the phone using only one hand (Frye, col. 1, lines 49-50).

**\*Note:** The U.S. Patent and Trademark Office considers Applicant's "or" language to be anticipated by any reference containing one of the subsequent corresponding elements.

***Allowable Subject Matter***

8. **Claims 2, 5, 9, 14, 15, 20, and 22** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. **Claims 17 and 18** are allowed.

10. The following is a statement of reasons for the indication of allowable subject matter:

**Claim 2** is allowed because the prior art does not teach or fairly suggest the device according to claim 1, *wherein the first and the second housing parts are arranged to move away from the third housing part by using said hinge mechanism before opening in said opened use position, and wherein the first and the second housing parts, when placed against each other, are arranged, upon closing in said closed use position, to be partly inserted in the third housing part by using said hinge mechanism to reduce the outer dimensions of the device.*

For **claim 5**, the prior art does not teach or fairly suggest a device according to claim 1, *wherein said electronic display comprises a partial display arranged on the inner wall of the first housing part and a partial display arranged on the inner wall of the second housing part, which are arranged for presenting information in at least two orientations transverse to each other for a vertical and a horizontal position of the device.*

For **claim 9**, the prior art does not teach or fairly suggest the device according to claim 8, wherein the electronic image sensor means comprise a turnable camera arm extending from the third housing part in between the first and the second housing parts, and *wherein the first and the second housing parts are provided with a space and a transparent housing for the camera arm and for protecting the camera arm.*

**Claim 14** is allowed because the prior art does not teach or fairly suggest the handle arrangement according to claim 13, *wherein for reducing the outer dimensions of the device, the handle arrangement is arranged to store said hinge mechanism in a movable manner and at least partly inside the third housing part, wherein the first and second housing parts connected to said hinge mechanism are configured to move away from the third housing part before opening in an opened use position.*

**Claim 15** is allowed because it *depends on claim 14.*

**Claim 17** is allowed because the prior art does not teach or fairly suggest a portable, foldable electronic device comprising an opened use and a closed use position, said device comprising at least:

*said electronic display comprises a partial display arranged on the inner wall of the first housing part and a partial display arranged on the inner wall of the second housing part, which are arranged for presenting information in at least two orientations transverse to each other for a vertical and a horizontal position of the device (in combination with the other claimed features).*

**Claim 18** is allowed because the prior art does not teach or fairly suggest a portable, foldable electronic device comprising an opened use and a closed use position, said device comprising at least:

*the electronic image sensor means comprise a turnable camera arm extending from the third housing part in between the first and the second housing parts, and wherein the first and the second housing parts are provided with a space and a transparent housing for the camera arm and for protecting the camera arm (in combination with the other claimed features).*



**Claim 20** is allowed because the prior art does not teach or fairly suggest the device according to claim 12, wherein said CMT interface comprises *an electronic display arranged on at least one of said two adjacent walls*, and wherein said electronic display is arranged for presenting data and information to the user in the closed use position of the device.

**Claim 22** is allowed because the prior art does not teach or fairly suggest a handle arrangement according to claim 16, wherein *the handle arrangement is arranged to insert one of said one housing parts at least partly in the third housing part*.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- |  |   |
|--|---|
| Goyal et al. (U.S. Pat. #6,751,473)    | A portable wireless communication terminal with housing consoles that can be reconfigured at the convenience of the user.                                 |
| Nishino et al. (U.S. Pat. #7,046,287)  | An information terminal designed to fold and pivot a pair of display units, which are hinged together. The hinge houses the photographing optical system. |
| Wada (U.S. Pat. #6,965,413)            | A foldable portable terminal unit containing a picture taking device.   |
| Constien (U.S. Pat. #6,259,932)        | A computer/telecommunications device with a CMT user interface with a display window located on the outer wall the device.                                |
| Kawakami et al. (U.S. Pat. #5,933,783) | A portable terminal with a CMT user interface with a display window and a telephone transmitter located on the outer wall the device.                     |

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carramah J. Quiett whose telephone number is (571) 272-7316. The examiner can normally be reached on 8:00-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NgocYen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CJQ

October 26, 2006

A handwritten signature in black ink, appearing to read 'Ngoc-Yen Vu', with a long horizontal line extending to the right.

NGOC-YEN VU  
SUPERVISORY PATENT EXAMINER